

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in this application.

1. (currently amended) An intervertebral implant comprising a central axis, an upper section suitable for laying onto the base plate of a vertebral body lying above, and a lower section suitable for laying onto the cover plate of a vertebral body lying below, wherein:

the upper section has a ventral side area, a dorsal side area, two lateral side areas, a top apposition surface, and a bottom surface;

the lower section has a ventral side area, a dorsal side area, two lateral side areas, a bottom apposition surface, and a top surface; and

the two sections are moveable in relation to each other via two joints arranged between the two sections, wherein:

each of the joints has a swivel axle and the two swivel axles are arranged substantially transversely or perpendicular to each other;

the two joints comprise an upper joint element connected with the upper section, a central joint element, and a lower joint element connected with the lower section; and

each joint comprises a first joint element with at least one axle coaxial to the swivel axle and a second joint element with at least one bearing shell receiving the axle, wherein:

roll bodies are inserted between the axles and the bearing shells, and

wherein one of the side areas of the upper section includes a depression for receiving at least a portion of an insert member, and one of the side areas of the lower section includes a depression for receiving at least another portion of the insert member, the insert member being threadably coupled to one of the upper and lower sections so that the position of the upper section can be temporary fixed with respect to the lower section.

2. (previously presented) The intervertebral implant according to claim 1, wherein the central joint element coaxial to the swivel axle comprises at least one axle belonging to the lower joint and the lower joint element comprises at least one bearing shell receiving the axle.

3. (previously presented) The intervertebral implant according to claim 1, wherein the upper joint element coaxial to the swivel axle comprises at least one axle belonging to the upper joint and the central joint element comprises at least one bearing shell receiving the axle.

4. (previously presented) The intervertebral implant according to claim 1, wherein the roll bodies are rotation-symmetric bodies.

5. (previously presented) The intervertebral implant according to claim 1, wherein the bearing shells have grooves in which the roll bodies are conducted in axial direction.

6. (previously presented) The intervertebral implant according to claim 1, wherein the axles have grooves in which the roll bodies are conducted in axial direction.

7. (previously presented) The intervertebral implant according to claim 5, wherein the grooves in the cross-section area orthogonal to the swivel axle are arranged in a circular arc with a sector angle between 0 degrees and 180 degrees

8. (canceled)

9. (canceled)

10. (canceled)

11. (currently amended) The intervertebral implant according to claim 19, wherein the ~~means~~ comprises an insert with a lower end and an upper end and a depressions are formed on the ventral side area of the upper and lower sections in the surfaces at each of the two sections, which are open on the ventral side areas, and that the insert with its ends can be inserted into each of the depressions.

12. (currently amended) The intervertebral implant according to claim 11, wherein the insert member includes first and second ends, the depressions formed on the ventral side area of the upper and lower sections are dovetail guides and the first and second ends of ~~on~~ the insert are arranged complementary to these dovetail guides.

13. (previously presented) The intervertebral implant according to claim 12, wherein the dovetail guides are tapered from the ventral side areas towards the dorsal side areas.

14. (previously presented) The intervertebral implant according to claim 1, wherein the upper and the lower sections each comprises at least two drill holes running through from the ventral side areas to the apposition surfaces with longitudinal axes for receiving bone fixation devices.

15. (canceled)

16. (currently amended) The intervertebral implant according to claim ~~14-15~~, wherein the longitudinal axes of the drill holes make an angle gamma with the central axis, the angle gamma lies in a range between 20 degrees and 65 degrees.

17. (previously presented) The intervertebral implant according to claim 14, wherein the longitudinal axes of the drill holes as seen from the ventral side areas diverge from the inner surfaces against the apposition surfaces.

18. (previously presented) The intervertebral implant according to claim 14, wherein the drill holes are conically tapered towards the apposition surfaces.

19. (previously presented) The intervertebral implant according to claim 14, wherein the drill holes have an internal thread.

20. (canceled)

21. (canceled)

22. (new) An intervertebral implant sized and configured for implantation between an upper and lower vertebra, the implant comprising:

an upper member having an upper surface for contacting at least a portion of the upper vertebra, a bottom surface, a dorsal side surface, a ventral side surface, and a pair of lateral side surfaces;

a lower member having a lower surface for contacting at least a portion of the lower vertebra, a top surface, a dorsal side surface, a ventral side surface, and a pair of lateral side surfaces; and

a central joint element having a top surface, a bottom surface, a dorsal side surface, a ventral side surface, and a pair of lateral side surfaces;

wherein the bottom surface of the upper member is operatively coupled to the top surface of the central joint element so that the upper member is moveable with respect to the central joint element about a first swivel axis, and the top surface of the bottom member is operatively coupled to the bottom surface of the central joint element so that the bottom member is moveable with respect to the central joint element about a second swivel axis, the first swivel axis being substantially perpendicular to the second swivel axis; and

wherein at least one of the side surfaces of at least one of the upper and lower members includes at least one elongated hole, the at least one elongated hole receiving a cam operatively associated with the central joint element, the interaction of the cam and the at least one elongated hole controlling the amount of movement between the central joint element and at least one of the upper and lower members.

23. (new) The intervertebral implant according to claim 22, wherein at least one of the bottom surface of the upper member and the top surface of the central joint element includes an elongated projection and the other one of the bottom surface of the upper member and the top surface of the central joint element includes an elongated recess for receiving the elongated projection; and wherein at least one of the top surface of the lower member and the bottom surface of the central joint element includes an elongated projection and the other one of the top surface of the bottom member and

the bottom surface of the central joint element includes an elongated recess for receiving the elongated projection.

24. (new) The intervertebral implant according to claim 23, further comprising one or more roll bodies between the corresponding projection and recess formed on the upper member and the central joint element and between the corresponding projection and recess formed on the lower member and the central joint element.

25. (new) The intervertebral implant according to claim 24, wherein the roll bodies are rotation-symmetric bodies sized and configured to be received in one or more grooves formed in the corresponding projections and recesses.

26. (new) The intervertebral implant according to claim 22, wherein at least one of the side surfaces of the upper member includes a depression for receiving at least a portion of an insert member, and one of the side surfaces of the lower member includes a depression for receiving at least another portion of the insert member, the insert member being threadably coupled to one of the upper and lower sections so that the position of the upper section can be temporary fixed with respect to the lower section.

27. (new) The intervertebral implant according to claim 22, wherein the upper member includes at least two holes extending from the ventral side surface to the top surface thereof for receiving bone fixation devices, and the lower member includes at least two holes extending from the ventral side surface to the lower surface thereof for receiving bone fixation devices, and wherein the implant has a central axis and the bone fixation devices each have a longitudinal axes, the longitudinal axis of the bone fixation devices diverging from the central axis of the implant.